

## **ABSTRACT OF THE DISCLOSURE**

A method and system for utterance verification is disclosed. It first extracts a sequence of feature vectors from speech signal. At least one candidate string is obtained after speech recognition. Then, speech signal is segmented into speech segments according to the verification-unit-specified structure of candidate string for making each speech segment corresponding to a verification unit. After calculating the verification feature vectors of speech segments, these verification feature vectors are sequentially used to generate verification scores of speech segments in verification process. This invention uses neural networks for calculating verification scores, where each neural network is a Multi-Layer Perceptron (MLP) developed for each verification unit. Verification score is obtained through using feed-forward process of MLP. Finally, utterance verification score is obtained by combining all verification scores of speech segments and is used to compare with a pre-defined threshold for the decision of acceptance or rejection of the candidate string.